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(54) Downhole pressure actuated locating system and locating method

(57)A locator device (100) that is selectively lockable within a nipple profile disposed within a wellbore. The locator device (100) comprises a locator key (106) disposed between a housing (104) and a mandrel (102) that is radially extendable through a window (108) of the housing (104). The locator key (106) has an engageable position and a retracted position with respect to nipple profile. A support ring (110) is disposed between the housing (104) and the mandrel (102) that maintains the locator key (106) in the engageable position until the support ring (110) is axially displaced relative to the mandrel (102). A engagement mechanism (116, 118) is disposed within a radial bore (114) of the mandrel (102) that is selectively engageable with the support ring (110) in response to a differential pressure such that axial force from the support ring (110) is transferred to the mandrel (102), thereby preventing axial displacement of the support ring (110) relative to the mandrel (102) and preventing the passage of the locator device (100) in a first direction relative to the nipple profile.

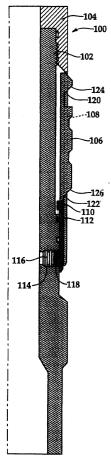


Fig.3A



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